

### (19) World Intellectual Property **Organization** International Bureau

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(43) International Publication Date 26 February 2004 (26.02.2004)

**PCT** 

### (10) International Publication Number WO 2004/016172 A1

(51) International Patent Classification7: 5/02, 5/0456

A61B 5/16,

(21) International Application Number:

PCT/FI2003/000608

- (22) International Filing Date: 18 August 2003 (18.08.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 20025039

16 August 2002 (16.08.2002)

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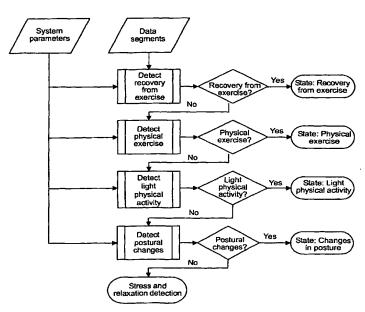
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCEDURE FOR DETECTION OF STRESS BY SEGMENTATION AND ANALYSING A HEART BEAT SIGNAL



(57) Abstract: The invention relates a procedure for the detection of stress state, wherein ambulatory heart beat signal is measured. In the first phase segments are defined from heart beat signal with a chosen rule for segmentation. Then at least one segment describing a physiological state with elevated cardiac activity due to physical workload and/or increased metabolic rate is identified and excluded, if exists, and segments other than the excluded segments are detected for a potential stress state, which is identified using a predetermined rule for the heart beat signal.



### INTERNATIONAL SEARCH REPORT

## A. CLASSIFICATION OF SUBJECT MATTER IPC7: A61B 5/16, A61B 5/02, A61B 5/0456 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC7: A61B, A63B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched SE,DK,FI,NO classes as above Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-INTERNAL, WPI DATA, INSPEC, MEDLINE, BIOSIS C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category\* Relevant to claim No. US 5267568 A (ATSUNORI TAKARA), 7 December 1993 A 1-14 (07.12.93), figure 1, abstract US 5891044 A (BORIS GOLOSARSKY ET AL), A 1-14 6 April 1999 (06.04.99), figure 5, abstract US 6104947 A (ILKKA HEIKKILÄ ET AL), Α 1-14 15 August 2000 (15.08.00), figure 5, abstract Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international filing date document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination document referring to an oral disclosure, use, exhibition or other being obvious to a person skilled in the art document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report (**0**.5 -11- 2003 4 November 2003 Name and mailing address of the ISA/ Authorized officer Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Patrik Widerdal/mj

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Internatial application No. PCT, 203/00608

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